

FIG. 1 is a block diagram of a CAD system 100. The CAD system 100 includes a User 102, a GUI 106, a Script Processor 108, and a Script 104. The User 102 interacts with the GUI 106 and the Script 104. The GUI 106 interacts with the Script Processor 108. The Script 104 interacts with the Script Processor 108. The Script Processor 108 interacts with the Graphical Components 110. The Graphical Components 110 include a SceneFile 112, a Scene Component 116-1, a Scene Component 116-2, a Scene Component 116-3, and a Scene Component 116-N. The SceneFile 112 is associated with a Scene File 114. The Scene Component 116-1, Scene Component 116-2, Scene Component 116-3, and Scene Component 116-N are associated with Native Types Metadata 130. The Native Types Metadata 130 includes Map Type 130-1, Light Type 130-2, and Native Type 130-N. The Graphical Components 110 also include a Component Hierarchy 122, which includes a Shoulder Component 124, an Upper Arm 126, and an Elbow 128.

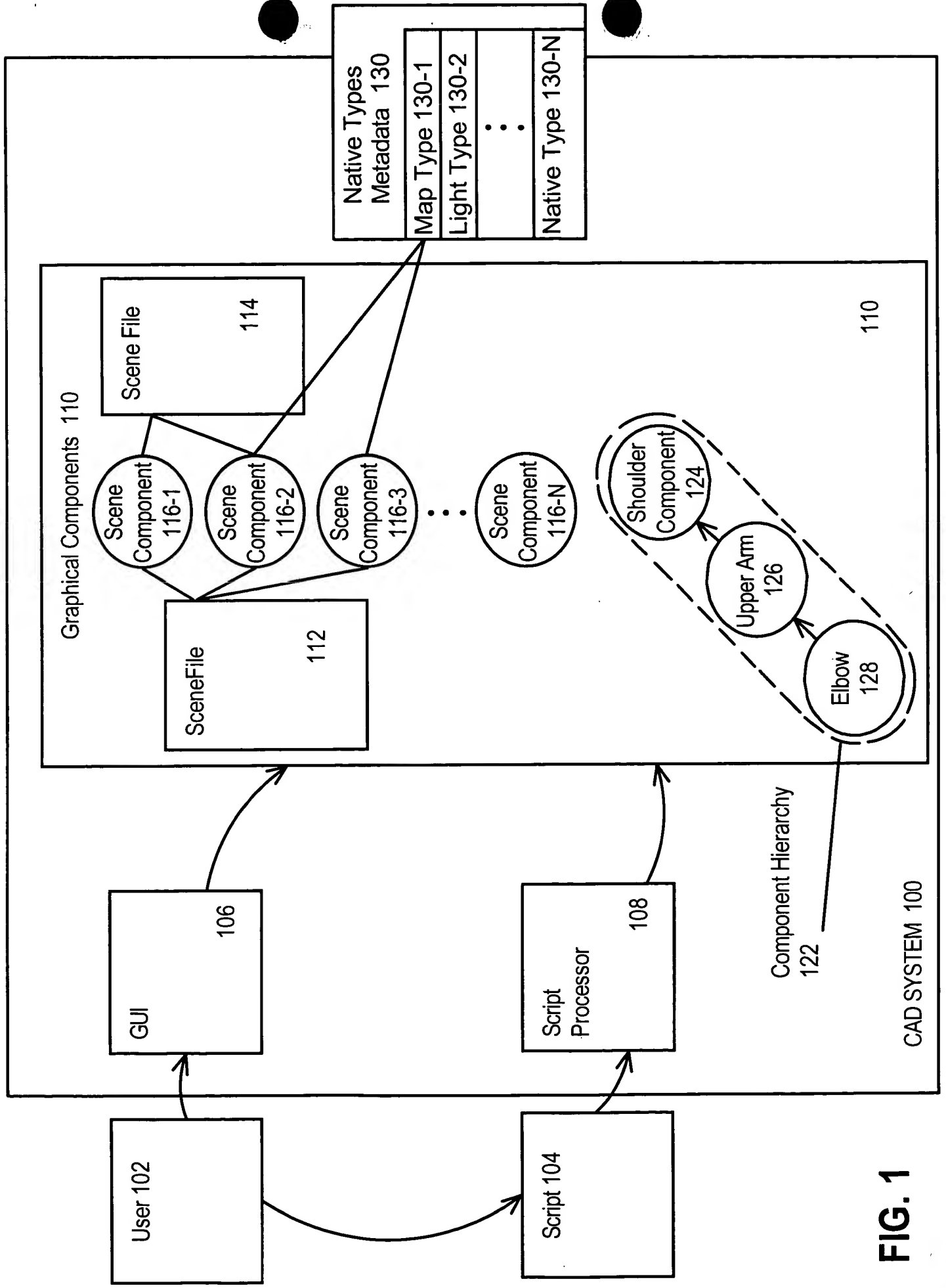


FIG. 1

Identifier - Pattern 214

Attribute identifier 216 Operation identifier 212

200 — $\underbrace{\text{box} * \text{position}} = [0,0,0]$

pattern-attribute identifier — 218

Hierarchy pattern identifier Operation identifier 222

220 — $\underbrace{\text{chicken} */ * \text{leg.position}} += [10,0,0]$

pattern-attribute identifier — 228

Container identifier 244 attribute identifier Operation identifier 242

240 — $\underbrace{\text{boxarray.position}} = [0,0,0]$

collection-attribute identifier — 248

Native type identifier 254 attribute identifier Operation identifier 252

260 — $\underbrace{\text{lights.value}} * = 0.5$

collection-attribute identifier — 258

FIG. 2

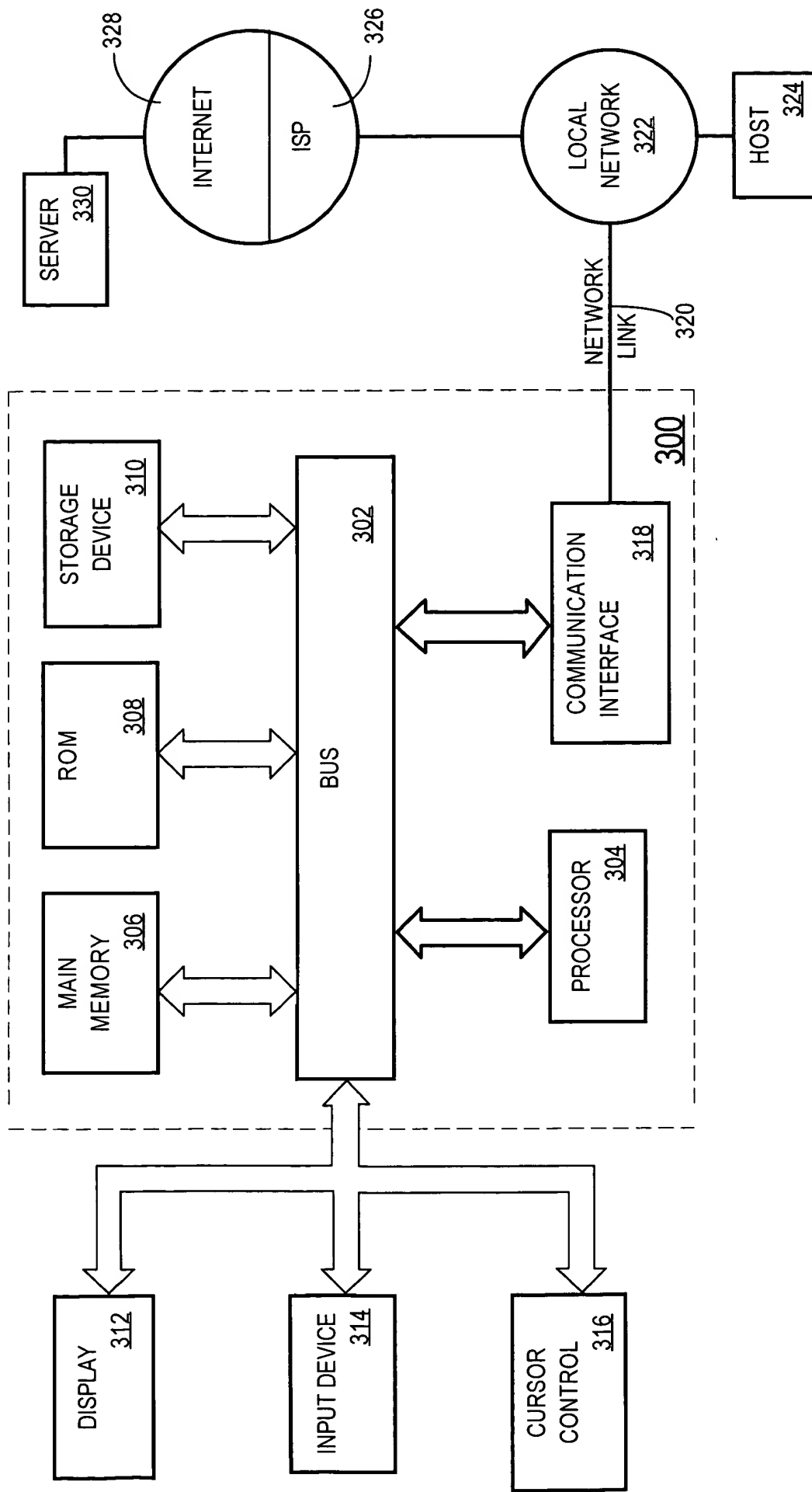


FIG. 3